

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method for ~~formatting an object file~~ tracing a program comprising:
generating a trace object code from trace source code; [[and]]
processing component information of the trace object code to generate the object file,
wherein the object file comprises a linear sequence of bytes comprising:
a file header, ~~a plurality of section headers, and a plurality of section data entries~~
a first section header of type enable control block (ECB),
a second section header of type action,
a first section data entry associated with the first section header comprising a
name of a probe to enable and a name of a second section data entry
of type action, and
the second section data entry associated with the second section header
defining at least one selected from a group consisting of a predefined
action and a name of a third section data entry of type program object
code corresponding to an action;
parsing the object file, by a tracing framework, to enable the probe in the program;
tracing the program, wherein tracing the program comprising encountering the probe;
executing at least one selected from a group consisting of the predefined action and the
action associated with the probe to obtain data.
2. (Cancelled)
3. (Original) The method of claim 1, further comprising:
saving the object file in a persistent data store.
4. (Cancelled)

5. (Currently Amended) The method of claim 1, wherein the trace source code comprises ~~at least one~~ a probe description associated with the probe, wherein the probe description compris[[ing]]es an optional predicate and [[an]] the action.
6. (Cancelled)
7. (Cancelled)
8. (Original) The method of claim 1, wherein processing component information comprises:
assigning a unique identifier for each section header in the plurality of section headers;
9. -20 (Cancelled)
21. (Currently Amended) A computer system for ~~formatting an object file~~ tracing a program comprising:
a processor;
a memory;
a storage device; and
software instructions stored in the memory for enabling the computer system to:
generate a trace object code from trace source code; [[and]]
process component information of the trace object code to generate the object file,
wherein the object file comprises a linear sequence of bytes comprising:
a file header, ~~a plurality of section headers, and a plurality of section data~~
~~entries~~
a first section header of type enable control block (ECB),
a second section header of type action,
a first section data entry associated with the first section header comprising a
name of a probe to enable and a name of a second section data entry
of type action, and
the second section data entry associated with the second section header
defining at least one selected from a group consisting of a predefined

action and a name of a third section data entry of type program object code corresponding to an action;

parse the object file, by a tracing framework, to enable the probe in the program;

trace the program, wherein tracing the program comprising encountering the probe; and

execute at least one selected from a group consisting of the predefined action and the action associated with the probe to obtain data.

22. (Currently Amended) The computer system of claim 21, wherein processing component information comprises software instructions stored in the memory for enabling the computer system to:

~~divide section data representing component information into loadable and unloadable data;~~

~~encode section data required by the tracing framework prior to other section data;~~

assign a unique identifier for each section header in the plurality of section headers[[]]

~~associate each section header in the plurality of section headers with a data element, wherein~~

~~the data element defines a data type of the section referenced by each section header;~~

~~and~~

~~define a particular section type to refer to the enabling of at least one probe.~~

23. (Cancelled)

24. (Original) The computer system of claim 21, further comprising software instructions stored in the memory for enabling the computer system to:

save the object file in a persistent data store.

25. (Cancelled)

26. (New) The computer system of claim 21, wherein the trace source code comprises a probe description associated with the probe, wherein the probe description comprises an optional predicate and the action.

27. (New) The computer system of claim 21, wherein the third section data entry comprises the program object code corresponding to the action.

28. (New) The computer system of claim 27, wherein the program object code is executed by a virtual machine.
29. (New) The computer system of claim 21, wherein the object file further comprises:
a third section header comprises a name of a fourth section data entry comprising program object code associated with a predicate, wherein the program object code associated with the predicate is executed when the probe is encountered during tracing.
30. (New) The method of claim 1, wherein the third section data entry comprises the program object code corresponding to the action.
31. (New) The method of claim 30, wherein the program object code is executed by a virtual machine.
32. (New) The method of claim 1, wherein the object file further comprises:
a third section header comprises a name of a fourth section data entry comprising program object code associated with a predicate, wherein the program object code associated with the predicate is executed when the probe is encountered during tracing.